Notice No.1

Rules and Regulations for the Classification of Ships, July 2021

The status of this Rule set is amended as shown and is now to be read in conjunction with this and prior Notices. Any corrigenda included in the Notice are effective immediately.

Please note that corrigenda amends to paragraphs, Tables and Figures are not shown in their entirety.

Issue date: October 2021

Amendments to	Effective date	IACS/IMO implementation (if applicable)
Part 1, Chapter 2, Section 2	1 January 2022	N/A



Part 1, Chapter 2 Classification Regulations

■ Section 2

Character of classification and class notations

- 2.5 Class notations (machinery special features)
- 2.5.5 The following class notation is associated with low flashpoint fuelled vessels and may be assigned as considered appropriate by the Classification Committee:

LFPF() Assigned where the main propelling and/or auxiliary machinery is designed to operate using a low flashpoint

fuel in accordance with the applicable LR Rules and Regulations. As a minimum, the LFPF() notation is to be appended by associated characters GC or GF and one two letter fuel identifier, and will be entered in

column 4 of the Register Book;

Assigned to liquefied gas carriers or tankers, where the main propelling and/or auxiliary machinery is designed to operate on a low flashpoint fuel. The notation also indicates that the gas fuelled machinery has been constructed, arranged, installed and tested in accordance with the relevant requirements of Use of

Cargo as Fuel of LR's Rules for Ships for Liquefied Gases, or is equivalent thereto.

Assigned to ships other than liquefied gas carriers or tankers, where the main propelling and/or auxiliary machinery is designed to operate on a low flashpoint fuel, or a combination of low flashpoint fuel and standard marine oil fuel. The notation also indicates that the low flashpoint fuelled machinery has been

standard marine oil fuel. The notation also indicates that the low flashpoint fuelled machinery has been constructed, arranged, installed and tested in accordance with the LR Rules and Regulations applicable to

the fuel(s) used.

The low flashpoint fuel (or fuels) that the ship is designed to use is (are) indicated in the notation using a two letter identifier:

NG Natural Gas

EG Ethane Gas

LP Liquid Petroleum Gas (LPG is considered to include pure propane or Butane or any mixture of the two)

HG Hydrogen Gas

ML Methanol

LFPF(xx,yy)

Ships complying with the requirements of LR's Rules and Regulations and fuelled by gas or other low-flashpoint fuel will be eligible for assignment of LR's Low Flash Point Fuel notation, LFPF(xx,yy) where 'xx' identifies the applicable Rules and Regulations and 'yy' identifies the type of fuel. The notation indicates that the gas or other low-flashpoint fuelled machinery has been designed, constructed, arranged, installed and tested in accordance with LR's Rules and Regulations.

With reference to 'xx', the following identifiers are used:

GF Ships complying with LR's *Rules and Regulations for the Classification of Ships using Gases or other Low-flashpoint Fuels* (incorporating the IMO IGF Code).

GC Ships complying with LR's Rules and Regulations for the Construction and Classification of Ships for the Carriage of Liquefied Gases in Bulk (incorporating the IMO IGC Code).

With reference to 'yy', the following identifiers are used:

NG Natural gas EG Ethane gas

PG Petroleum gas (considered to include pure propane or butane or any mixture of the two)

ML Methyl alcohol (methanol)

EL Ethyl alcohol (ethanol)

HY Hydrogen AM Ammonia

2.8 Descriptive notes

2.8.7 **GR**. Assigned to ships other than LNG carriers, detailing the aspects of design and construction that are prepared for gas fuel operation in accordance with LR's Rules and Regulations in force on the date of 'contract for construction'. If a ship has been assigned the **LFPF(GF, NG)** notation then it will not be eligible for the **GR** descriptive note. The descriptive note **GR**, with the extension of one or more of the following associated characters shown in brackets, may be entered in column 6 of the Register Book.

- A The design of the gas fuel system has been approved in principle.
- S Enhanced structural reinforcement and appropriate materials have been fitted to support the proposed gas storage tank.
- T Fuel storage arrangements installed in accordance with an approved design.
- P Gas fuel piping arrangements installed in accordance with an approved design.
- Engineering systems have been installed in accordance with an approved design. Additional letters will be assigned in brackets to identify which items may be gas-fuelled:

M = main engine(s)

A = auxiliary engines

B = boiler

I = incinerator

See LR's Rules and Regulations for the Classification of Ships using Gases or other Low-flashpoint Fuels, 2 General for further detail.

2.8.7 The following descriptive note is associated with low flashpoint fuelled vessels and may be assigned as considered appropriate by the Classification Committee:

GR(yy,z) Ships complying with particular aspects of these Rules may be eligible for assignment of LR's gas or other low-flashpoint fuel Gas Ready descriptive note, GR(yy,z) where 'yy' identifies the type of fuel (consistent with the LFPF notation) and 'z' identifies the particular aspects which have been approved or approved and installed. This descriptive note is not an LR class notation and is provided solely for information. If a ship has been assigned the LFPF notation, then it will not be eligible for the GR descriptive note for the same type of fuel.

With reference to 'z', the following identifiers are used:

- A Approval in Principle. The design of the fuel system has been approved in principle.
- **S** Structural Reinforcement Installed. Enhanced structural reinforcement using appropriate materials to support the proposed fuel storage tank has been installed in accordance with an approved design and surveyed accordingly.
- Tank Installed. The fuel storage tank, all tank valves including the tank master isolation valve, fuel venting arrangements and, where applicable, the fuel storage hold space, structural fire protection and ventilation arrangements for under deck tank locations have been built under survey and installed in accordance with an approved design and surveyed accordingly.
- **P** Piping Installed. Piping and equipment associated with the fuel system, e.g. pipes, pumps, valves, processing equipment etc. from the bunker manifold to the fuel consumers, bunkering arrangements and associated access arrangements including structural fire protection as applicable, have been installed in accordance with an approved design and surveyed accordingly.
- E Equipment and Machinery Installed. Equipment and machinery which is intended to be supplied by the fuel system has been installed in accordance with the approved design and surveyed accordingly. Additional letters, in brackets, identify the items of equipment or machinery installed:
 - M Main engine(s)
 - A Auxiliary engine(s)
 - B Boiler(s)
 - I Incinerator(s)
 - T Gas Turbine(s)
 - F Fuel cell generator(s)

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